Anthropogenic Subsidies Affect Common Raven Nesting, Space-Use, and Movement

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ASTRACT: Common raven (*Corvus corax*) numbers have increased drastically throughout the Great Basin. Anthropogenic resources provide subsidies for growing raven populations with potential negative impacts on prey species including species of conservation concern such as greater sage-grouse (*Centrocercus urophasianus*). Our objective was to identify the effects of anthropogenic subsidies on raven nesting, space-use, and movement in sage-grouse habitat. We captured and radio-tagged 67 ravens between 2015 and 2018 and identified 70 nests during the 2018 breeding season. We found the majority of nests were built on anthropogenic structures. We also examined raven use of anthropogenic subsidies including highways, railroads, landfills, and agricultural fields. Finally, we examined movement behavior in terms of hourly step-length in relation to anthropogenic subsidies. Our results illustrate how ravens benefit from anthropogenic subsidies in sage-grouse habitat and the importance of subsidy management in controlling raven populations.

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